

**ABSTRACT**

An embolic coil comprises an elongated core element formed of a shape memory material treated to define a memorized secondary coil shape and an elongated outer element wound around the elongated core element to define a primary coil shape of the embolic coil. A method of forming an embolic coil, comprises the steps of imparting a memorized shape to a core element formed of a shape memory material, wherein the memorized shape defines a secondary coil of the embolic coil and straightening the core element in combination with the steps of winding an elongated outer element around the straightened core element to form a primary coil of the embolic coil and releasing the straightened core element when the device has been positioned at a deployment location to form the secondary coil of the embolic coil.